Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims

1. (Currently Amended) A method of enhancing causing expression of a desired heterologous protein at mucosal effector-sites in mucosal cells of a mammal, the method comprising placing a nucleotide sequence encoding the heterologous protein to be expressed under the control of a promoter having the nucleotide sequence consisting of a nucleotide sequence of SEQ ID NO: 2, the promoter being operatively interconnected to the nucleotide sequence encoding the heterologous protein, in a recombinant gut-colonizing microorganism, bacterium, orally administering the microorganism bacterium to the mammal, and causing expression of the desired heterologous protein in mucosal cells of the mammal.

2-22. Cancelled.

23. (Currently Amended) The method of claim 1, wherein the desired heterologous protein induces a protective immune response against a pathogen in the mammal.

Claims 24-25. (Cancelled).

- (Currently Amended) The method of claim 23, wherein the recombinant gut-colonising microorganism gut colonizing bacterium is a Salmonella spp.
- 27. (Previously Presented) The method of claim 26, wherein the Salmonella sup, is Salmonella typhimurium or Salmonella typhi.

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- 28. (Previously Presented) The method of claim 1, wherein the recombinant gut-colonising microorganism is attenuated.
- (Previously Presented) The method of claim 23, wherein the pathogen is Yersinia pestis.
- (Previously Presented) The method of claim 29, wherein the desired protein comprises the F1-antigen of Yersinia pestis.
- 31. (Currently Amended) The method of claim 23, wherein the recombinant gut-colonising microorganism bacterium is administered as a composition which further comprises a pharmaceutically acceptable carrier or diluent.

(Cancelled).

- 33. (New) A method of inducing a serum or mucosal antibody response against Yersinia pestis comprising expressing an F1-antigen of Yersinia pestis in an attenuated recombinant Salmonella spp. by placing a nucleotide sequence encoding the F1-antigen under control of a promoter consisting of a nucleotide sequence of SEQ ID NO: 2, the promoter being operatively interconnected to the nucleotide sequence, and administering a dosage of the attenuated recombinant Salmonella spp. orally to a mammal.
- (New) The method of Claim 33 wherein the Salmonella spp. is Salmonella typhimurium or Salmonella typhi.
- 35. (New) The method of Claim 33 wherein the attenuated recombinant Salmonella spp. is administered with a pharmaceutically acceptable carrier or diluent.